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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,765	12/28/2006	Alain Bello	292740US0PCT	8698
22850	7590	11/18/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ZHENG, LOIS L	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 11/18/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/583,765	Applicant(s) BELLO ET AL.	
	Examiner LOIS ZHENG	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-13 are amended in view of applicant's amendment filed 31 July 2009. Claims 14-17 are canceled. Therefore, claims 1-13 are currently under examination.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Status of Previous Rejections/Objections

3. The objection to claims 4-7 and 11-16 is withdrawn in view of applicant's claim amendments and cancellation of claims 14-16 filed 31 July 2009.
4. All previous rejections are withdrawn in view of applicant's claim amendments and cancellation of claims 14-16 filed 31 July 2009.

New rejection ground based on WO 00/15878, whose corresponding English equivalent is Bello et al. US 6,528,182 B1(Bello), is set forth below.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7-18 of Bello et al. U.S. Patent No. 6,528,182 B1(Bello). Although the conflicting claims are not identical, they are not

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patentably distinct from each other because claims 7-18 of Bello teaches zinc-plated steel surface treatment process comprising applying an aqueous coating solution comprising more than 0.07mol/l of sulfate ions and more than 0.01 mol/l of zinc ions to the zinc-plated steel surface, anodically polarizing the treated surface at a current density of great than 20A/dm^2 to form a coating layer comprising $3.5\text{-}27\text{mg/m}^2$ of hydroxysulfate, rinsing the treated surface and subsequently applying a film of lubricating oil on coated surface. Even though claims of Bello do not explicitly teach coating weight of the lubricating oil film, one of ordinary skill in the art would have found it obvious to have routinely optimized the coating weight of the lubricating oil film by varying the lubrication treatment time in order to achieve desired amount of lubrication.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/15878, whose corresponding English equivalent is Bello et al. US 6,528,182 B1(Bello).

The teachings of Bello are discussed in paragraph 6 above.

Regarding claim 1-13, Bello teaches a zinc-plated steel surface treatment process that is the same as claimed process. In addition, since Bello's treatment

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solution is exactly the same as claimed, the coating formed by the process of Bello would inherently comprise zinc hydroxysulfate and zinc sulfate as claimed.

In addition, Bello further teaches applying about 1g/m^2 of lubricating oil on treated zinc-plated steel surface(col. 8 lines 7-14).

Even though Bello does not explicitly teach the claimed lubricating oil film weight, the claimed lubricating oil film weight is a result effective variable because it affects the lubricating properties of the coated surface. Therefore, one of ordinary skill in the art would have found it obvious to have routinely optimized the coating weight of the lubricating oil film by varying the lubrication treatment time and/or the amount of lubricating oil applied in order to achieve desired lubrication effect.

Response to Arguments

9. Applicant's arguments filed 31 July 2009 have been fully considered but they are not persuasive.

In the remarks, applicant argues that Bello does not teach the claimed lubricating oil film of $0.2\text{-}0.5\text{g/m}^2$, instead Bello teaches a standard lubricating oil film of about 1g/m^2 , which might not be sufficient without the claimed treatment step according the instant specification.

The examiner does not find applicant's argument persuasive because amount or the coating weight of lubricating oil required on a metal surface such as a zinc plated steel sheet depends upon the intended purpose for the metal surface and the type of work the metal surface will be subjected to. The amount or the coating weight of the lubricating oil affects the lubricating properties of the treated substrate, and therefore, is

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a result effective variable. Therefore, one of ordinary skill in the art would have found it obvious to have routinely optimized the coating weight of the lubricating oil film by varying the lubrication treatment time and/or the amount of lubricating oil applied in order to achieve desired lubrication properties.

Applicant further argues that Bello does not teach applying its sulfate containing treatment solution to avoid powdering during forming and Kunde N.D. et al. disclose the occurrence of such powdering.

The examiner does not find applicant's argument persuasive because applicant's argument is directed to the intended purpose of the claimed sulfate containing treatment and is not directed to any specific process steps that differentiate the instant invention with the process of Bello. In addition, applicant's argument regarding Kunde N.D. et al. is moot because the rejection ground based on Kunde N.D. et al.

Applicant further argues that Table 2 of the instant invention demonstrates significant reduction in friction coefficient achieved by the instantly claimed sulfate treatment in comparison to a surface that is untreated.

The examiner does not find applicant's argument persuasive because Table 2 of the instant invention only demonstrates the significance of the sulfate treatment to the metal surface, not the significance of the claimed lubricating oil coating weight range. Since Bello teaches a same sulfate treatment process utilizing the same treatment solution, the examiner concludes that the process of Bello would have produced the same reduction in friction coefficient with less coating weight as claimed.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LOIS ZHENG whose telephone number is (571)272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art
Unit 1793

LLZ